

Health Advisory – CDC Recommendations for Diagnosing and Managing *Shigella* Strains with Possible Reduced Susceptibility to Ciprofloxacin, 18 April 2017

Actions requested:

- **Order stool culture for patients suspected of having a *Shigella* infection to obtain isolates for antimicrobial susceptibility testing.** Culture-independent diagnostic testing does not provide an isolate and therefore cannot be used to assess susceptibility.
- **Order antimicrobial susceptibility testing when ordering stool culture for *Shigella*.**
 - When antimicrobial susceptibility testing is performed by broth microdilution, request ciprofloxacin (cipro) testing that includes dilutions of 0.12 µg/mL or lower.
 - Even when treatment is not indicated, ordering susceptibility testing to identify patients with drug-resistant infections will help to inform when to return to work, school, & group settings.
- **Do not routinely prescribe antibiotic therapy for *Shigella* infection. Instead, reserve antibiotic therapy for patients for whom it is clinically indicated.**
- **When antibiotic treatment is indicated, tailor antibiotic choice to antimicrobial susceptibility results as soon as possible with special attention given to the MIC for fluoroquinolone antibiotics. Avoid prescribing fluoroquinolones if the cipro MIC is 0.12 µg/mL or higher even if the laboratory report identifies the isolate as susceptible.**
- **Obtain follow-up stool cultures in shigellosis patients who have continued or worsening symptoms despite antibiotic therapy.**
- **Call Public Health (206-296-4774) to report cases and for guidance on when patients may return to childcare, school, or work.** Report cases with a cipro MIC of 0.12–1 µg/mL to facilitate further testing of the isolate.
- **Counsel patients with active diarrhea on how they can prevent spreading the infection to others, regardless of whether antibiotic treatment is prescribed.**
 - Wash hands with soap and water for at least 20 seconds, especially after using the toilet, after handling a soiled diaper, and before eating.
 - Avoid preparing food for others, when possible.
 - Children with active diarrhea should not attend childcare, school, or group activities while ill.
 - Wait to have sex (vaginal, anal & oral) for 2 weeks after diarrhea resolved. Use safe sex practices for several weeks after resuming sex, because *Shigella* may still be in stool for several weeks.
- **See complete CDC recommendations at: <https://emergency.cdc.gov/han/han00401.asp>**

Background: CDC has identified an increase in *Shigella* isolates in the US with MIC values of 0.12–1 µg/mL for ciprofloxacin. These strains often have a quinolone resistance gene that may lead to clinically significant reduced susceptibility to fluoroquinolone antibiotics. Clinicians treating patients with multidrug-resistant shigellosis for whom antibiotic treatment is indicated should avoid prescribing fluoroquinolones if the ciprofloxacin MIC is 0.12 µg/mL or higher even if the laboratory report identifies the isolate as susceptible, and should work closely with their clinical microbiology laboratory and infectious disease specialists to determine appropriate antimicrobial therapy.

Resources:

- CDC Shigella site: <https://www.cdc.gov/shigella/>
- Public Health shigella info: <http://www.kingcounty.gov/depts/health/communicable-diseases/disease-control/shigellosis.aspx>